## **Amendments to the Drawings:**

The attached sheets of drawings include changes to Figs. 8, 11, and 16. Enclosed are new drawings (marked "replacement sheets") and marked-up drawings (marked "annotated sheets").

## **REMARKS/ARGUMENTS**

Objections have been made to the drawings. In Fig. 8 the line between nodes 154 and 156 is identified as "167". However, as indicated at page 7, lines 4-5 of the specification the item is identified as 160 which is the correct identification. Correction has been made. At page 19, line 19 of the specification concerning Fig. 10, the Examiner is correct in indicating that "block 248" should be - - block 258 - -. Correction has been made to the specification. The Examiner has indicated that Fig. 11 labeled to the line between blocks 370 and 374 as item 272. The Examiner correctly notes that it is provided at page 22, line 32 of the specification that number should be 372. Correction has been made. Additionally, at Fig. 16A, a line extending from block 742 to 746 was not numbered. That number should be 744 as indicated at page 32, line 11 of the specification. Correction has been made.

In connection with the drawing corrections, replacement sheets so labeled are submitted herewith along with a copy of those sheets labeled "annotated sheets" showing the corrections in red is submitted herewith. Finally, the Examiner has indicated that while arrows 820, 821 and 822 are labeled on Fig. 17, they are not described in the specification. Correction has been made at page 33, line 25 of the specification to indicate that the association of nets 812-814 with the weight table items 816-818 are represented respectively by arrow pointers 820-822.

It is noted that claim 8 has been objected to inasmuch as the word "and" should have been inserted after the semicolon on line 3. That correction has been made. That claim 13, line 2 the period following the word "documents" has been deleted and replaced with a comma. At claim 22, the semicolon following the term "comprising" at line 30 has been deleted and replaced with a colon. The identification "(c81)" at line 3 of claim 23 has been changed to - - (c8.1) - -. Typographical error has been corrected in the specification. For instance, at page 11, line 23 the term "word" has been changed to - - words - -. At page 15, line 11, the number "80" has been deleted. At page 16, line 25 the term "connected" has been changed to - - connecting - -. At page 19, line 19, the number "248" has been changed to - - 258 - -; at line 22, the term "Were" has been changed to - - Where - -. At page 24, line 9, the term "treated (block 429)" have been deleted. At page 27, line 17 before "document" the terms - - set of - - have been inserted; at line 18, the term "deliminating" has been changed to - - delimiting - -. At page 28, line 4, the term "sparious" has been changed to - - spurious - -. At page 31, line 11, the term "16A" has been changed to - - 16C - -; at line 26, the letter "A" has been inserted following the number 16; at line 31, the term "16A" has been changed to - - 16C - -. At page 32, line 8,

the term "16A" has been changed to - - 16C - -. At page 33, line 25, following "820" the term - - 822 - - has been inserted.

With the present response, declarations as drawn under the provisions of 37 CFR 1.132 and 37 CFR 1.131 are submitted.

With respect to the latter declaration, the present application claims benefit of Provisional application No. 60/425,854 filed November 12, 2002 which fully supports the teachings hereof. Claims 1, 5, 13, 16 and 17 have been rejected, inter alia, on a reference identified as U. S. application publication No. US2003/0135513, filed August 27, 2002 and relying upon Provisional application No. 60/314,664, filed August 27, 2001 (the Quinn, et al., Provisional). The Rule 132 Declaration will be seen to incorporate the Quinn, et al., Provisional as an Exhibit B and demonstrates that the Quinn, et al. Provisional provides no support for the paragraph or paragraphs cited by the Examiner in rejecting the above-noted claims. Accordingly, the Quinn, et al., reference is limited to its filing date of August 27, 2002. If an application claims benefit under 35 USC 119(e) to a Provisional application, the effective filing date is the filing date of the Provisional application for any claims which are fully supported under the first paragraph of 35 USC 112 by the Provisional application. See MPEP 706.02 V.(D).

Those paragraphs of the Rule 132 Declaration looking to the inadequacy of support provided by the Quinn, et al., Provisional are seen at paragraph Nos. 6, 7, 11, 13, 15 and 36.

Notwithstanding the removal of Quinn, et al., as a reference, in the discourse to follow as well as in the Rule 132 Declaration, Quinn, et al., will be seen to be readily distinguished.

It is noted that claims 1-21 have been rejected under §103 of the Patent Statute as being unpatentable over Quinn, et al., in view of United States application publication No. 2005/0086238 by Nevin, III (Nevin).

It is noted that with respect to the introductory paragraph of claim 1 the Examiner has indicated that Quinn, et al., discloses a method for evaluating the text content of a database. As noted as paragraph 9 of the Rule 132 Declaration, there is a fundamental difference between the present invention and Quinn, et al., in that the present invention is a searching method for iteratively developing search questions and rules as compared to Quinn, et al., which is a technology for building a database of entire described by well-defined keyword attributes. Quinn, et al., is not concerned with a method for generating questions utilized to effectively search a database. By contrast, Quinn, et al., is building a database based upon four well-defined keyword attributes. In applying the rejection to claim 1, the Examiner has paraphrased

steps (a) through (e) with references to paragraphs in Quinn, et al. In this regard, step (a) provides a computer system with a interface and display, the Examiner citing paragraph 0106. In this regard, visual graphics are employed as part of the search procedure of the invention. Its interesting to note that the subject paragraph is not supported by the Quinn, et al., Provisional. Step (b) gathering documents from the database into the system has been identified in Quinn, et al., at paragraph 0040, lines 1-4. That paragraph looks to the four defined attributes which are used to construct the database. By contrast, the entire text database is inserted into the computer system for the purpose of searching it. Step (c) of claim 1 calls for normalizing the gathered documents and the Examiner has cited paragraph 0055 of Quinn, et al. As noted at paragraph 12 of the Rule 132 Declaration, while the term "normalized" is used at paragraph 0055, it describes such normalization as the aggregate of data for the purpose of input error correction and not normalizing each document as in a database. The subject of normalization is addressed in detail in connection with claim 22 et seq. Step (d) of claim 1 calls for fingerprinting the gathered documents and the Examiner has cited paragraph 0054 of Quinn, et al. As noted at paragraph 14 of the Rule 132 Declaration, Quinn, et al., describes as illustrated in Fig. 2 that fingerprints are extracted for storage in text and fingerprint database. In contrast, step (d) fingerprints documents in a given and unaltered database. Step (e) of claim 1 provides for determining a text criteria with respect to the document population and the Examiner has cited paragraph 0093 of Quinn, et al., lines 4-7 with the comment that different genres are considered to represent the text criteria. That paragraph of Quinn, et al., describes the organization of a database with respect to a predetermined fixed criteria described as artist name, album name and genre. Those criteria are used to build a database. By contrast, the text criteria of step (e) are not fixed and are utilized to ultimately develop a search question, not to construct a database. See paragraph 16 of the Rule 132 Declaration.

The Examiner then proceeds to consider steps (f) through (k) of claim 1 in conjunction with the Nevin reference. Step (f) of claim 1 provides for forming a net comprising at least two nodes associated by at least one interaction and displayable at the display as two or more spaced apart nodes connected by an interaction. The Examiner cites Fig. 1 of Nevin with respect to this step. As noted at paragraph 19 of the rule 132 Affidavit, Nevin provides a collection of nodes which are inter-associated by a relationship, i.e., parent is as to father and son. By contrast, the two or more spaced apart nodes of the instant invention are connected by an interaction which is quite different from the noted relationship. As noted in the declaration, this relational association of nodes has been in the art for decades and is well understood.

Such a relation provides information about a database but does not address the subject of searching it. Step (g) of claim 1 provides for loading text criteria into at least one of the nodes and the Examiner has referenced paragraph 081 of Nevin with the comment that data is stored in the node. As addressed at paragraph 20 of the Rule 132 Declaration, the noted paragraph of Nevin describes a graphical or visual organization algorithm and not text (search) criteria as set forth at step (q). Step (h) of claim 1 provides that for each document of the database, calculating its geometric relative distance from a said node to derive one or more node attractors. The Examiner has cited paragraph 0031 and 0185 of Nevin with the comment that the connection strength of the links from one node to another is considered to represent the relative distance. The Examiner's analysis is incorrect. As noted at paragraph 22 of the Rule 132 Declaration, Nevin describes that predetermined attribute data is stored in the nodes and these nodes are linked by relationship of variable links. By contrast, step (h) provides that for each document of a database its geometric relative distance from a node is calculated to derive one or more attractors. Note that the claim is addressing documents of the database and is not addressing the positioning of nodes as Nevin does. As noted at paragraph 24 of the Rule 132 Declaration, there are no document symbols in calculating relative distance described or suggested in Nevin which only describes a positioning and relative relationship between nodes. In this invention, however, relative positioning of the net nodes is a matter of convenience and bears no significance. Further, as noted at paragraph 25 of the Rule 132 Declaration, paragraph 0084 in Fig. 2 of Nevin represents an algorithm to determine what nodes belong together once a net is developed by Nevin. That is the final result, Nevin is finished. Step (i) calls for displaying a net in combination with one or more document symbols, each representing a document located in correspondence with the calculated relative distance. There are no documents in Nevin. There are no document symbols in Nevin. Nevin only shows nodes and relationship lines, the nodes being arranged with respect to their relationship. In the present application, the net is only a platform for organizing documents. Step (i) of claim 1 provides for visually examining the display of the net and the document symbols. The Examiner has cited paragraph 0084, lines 14-17 with respect to this step. It is noted at paragraph 27 of the Rule 132 Declaration. Nevin is irrelevant with respect to step (j) inasmuch as there are no documents in Nevin and there is no display of document symbols. Step (k) provides for determining from the said document symbol locations at said display, those documents, if any, which are more likely to correspond with the text criteria. The Examiner has referenced paragraphs 0313 and 0315 of Nevin and commented that the user determines which categories are considered to be

good or bad. As noted at paragraph 19 of the Rule 132 Declaration, the noted paragraphs have no applicability to step (k), there being no determination in Nevin with respect to document symbol locations at the display and from those document symbol locations determining any likely to correspond with the text criteria. There simply is no relevance of these paragraphs of Nevin to step (k).

Next, the Examiner provides a statement that one would be motivated to combine Quinn, et al., and Nevin. That is at least debatable. Quinn, et al., describes a technique for building a database. Nevin describes a technique for displaying a position-based relationship of nodes. Neither, however, has anything to do with searching a database.

Claim 2, dependent upon claim 1 looks to refining step (f) in that the net is formed with nodes defined as circles and interaction defined as a line extending between the circle. The claim should be considered allowable for reasons given in connection with claim 1.

Claim 3, dependent upon claim 1 provides that step (g) loads the text criteria into a positive designated one of the nodes. In rejecting the claim, the Examiner has cited paragraphs 0031 and 0083, lines 4-14 of Nevin and commented that data is stored in the nodes; a node can have a positive position. With respect to the latter comment, as set forth in paragraph 31 of the Rule 132 Declaration, the present invention has no concern with the position of nodes as does Nevin and Nevin is not concerned with whether a node is positive or negative in the sense of the present invention. The text criteria in claim 3 is a search function and Nevin doesn't search.

Claim 4, dependent upon claim 3 provides that step (f) forms the net as comprising a positive designated node and a null designated node connected by said interaction. The Examiner has cited paragraphs 0083 and 0084, lines 4-14 and 0123 with respect to this claim and has commented that the last node is used as the null node; the nodes are connected by lines to demonstrate an interaction. As set forth at paragraph 33 of the Rule 132 Declaration, a null node in accordance with the invention is a node which has no content in it at all whereas Nevin describes that during data entry if one doesn't identify the node of interest, the program as a default convention will put the argument on the last node. This has no resemblance to the utilization of a null node as taught in the present invention.

Claim 5, dependent upon claim 1 provides initially that step (e) determines the text criteria as criteria document textual material then, the claim provides that step (g) comprises the step (g1) normalizing the criteria document textual material; and (g2) fingerprinting the normalized criteria document textual material. In rejecting this claim, the Examiner has cited paragraph 0093, lines 4-7 of Quinn, et al; paragraph 0055, lines 1-5 of Quinn, et al., with respect

to step (g1) and paragraph 0054 Quinn, et al., with respect to step (g2). Further, with respect to step (e) the Examiner comments that different genres are considered to represent the text criteria. As set forth at paragraph 35 of the Rule 132 declaration, paragraph 0093 of Quinn, et al., describes an organization of database with respect to predetermined fixed criteria. Searching is by keywords within predefined attributes as opposed to using document textual material as criteria for developing a search question. Concerning step (g) as set forth at paragraph 39 of the Rule 132 Declaration, the normalization as described at paragraph 0055 in Quinn, et al., is of a different type, being concerned with such things as correction of spelling and the like known as regularization or rationalization, an entirely conventional activity. The reference provides no suggestion of normalizing a criteria document textual material, i.e., the evolution of a search question. As noted at paragraph 40 of the Rule 132 Declaration, with respect to step (g2) Quinn, et al., does not suggest the normalized criteria document textual material which is fingerprinted.

Claim 6, dependent upon claim 1 looks to the definition of steps (e) through (h). Step (e) is described as determining a positive text criteria and a negative text criteria with respect to the document population. The Examiner has cited paragraph 0084, lines 4-14 of Nevin with respect to this step. As set forth at paragraph 41 of the Rule 132 Affidavit, Nevin is not concerned with search criteria, let along positive and negative criteria. Nevin is interrelating nodes in a positional sense. Claim 6 further provides that step (f) forms a net comprising one or more positive designated nodes, one or more negative designated nodes and one or more interactions. The Examiner has cited paragraph 0084, lines 4-14 of Nevin in this regard. As stated at paragraph 42 of the Rule132 Declaration, Nevin does not use interactions between positive and negative nodes but utilizes relationships generally identified by node position. Claim 6 provides that step (g) loads the positive text criteria into said one or more positive designated nodes and said negative text criteria into said one or more negative designated nodes. The Examiner has cited paragraph 0031 of Nevin with the comments that data is stored in the nodes. As noted at paragraph 43 of the Rule 132 Declaration that while data might be stored in nodes in Nevin, it is stored for a different purpose than the present invention. Nevin is determining interrelationships between nodes by spacing while the present invention is developing search criteria. Step (h) of claim 6 provides for calculating for each document of the database, its geometric relative distance from both the positive designated nodes and the negative designated nodes. For this step, the Examiner has cited paragraphs 0031 and 0185 of Nevin and commented that the connection strength of the length from one node to another is

considered to represent the relative distance. As set forth at paragraph 44 of the Rule 132 Declaration, the Examiner fails to observe that the step at hand is one wherein relative distance is calculated with respect to documents, not nodes as described in Nevin.

Claim 7, dependent upon claim 1 provides that step (i) displays the one or more document symbols as square. The claim should be considered allowable for reasons given in connection with claim 1.

Claim 8, dependent upon claim 1 has two additional steps. Steps (I) provides for retrieving the identification of those documents resulting from the determination of step (k). The Examiner has cited paragraphs 0313 and 0315 of Nevin with respect to this step. Step (m) provides for viewing one or more of the documents identified in step (I) and determining the quality of the match thereof with said step (e) text criteria. For this step the Examiner has cited paragraphs 0313 and 0315 of Nevin. As noted at paragraph 46 of the Rule 132 Declaration, the cited paragraphs of Nevin have no relationship to documents, are not describing the same operation or even a similar operation and are not evaluating the quality of the match of documents with text criteria. With these steps, the iterative process can commence to be carried out to improve the searching text criteria which is further elaborated upon in claim 9.

Claim 9 dependent upon claim 8 adds additional steps (n) through (p). Step (n) identifies a new text criteria as a result of said step (m) determination of an insufficient said quality of said match. Step (o) provides for adding the identified new text criteria to the step (g) text criteria loaded into the positive designated one of the said nodes. Step (p) provides for reiterating steps (h) through (n). For each of these three steps, the Examiner has referenced paragraphs 0313 and 0315 of Nevin which is interative. That as set forth at paragraph 48 of the Rule 132 Declaration, Nevin identifies the properties of nodes precisely whereas by contrast, new text criteria is determined to improve a search question and to develop new text criteria which is loaded into the positive node, whereupon (step p) there is a reiteration of steps (h) through (m). Nevin is not concerned with documents and the searching of their contents.

Claim 10, dependent upon claim 8 adds steps (q) through (t). For all of these steps, the Examiner has cited paragraphs 0313 through 0316 of Nevin. Step (q) provides that subsequent to said step (m), identifying and viewing at said display a list of features common to those documents the identification of which was retrieved in step (l). Step (r) provides for identifying a new text criteria in correspondence with said step (q) identification and viewing at said display of said features common to those documents, the identification of which was retrieved in step (l). Step (s) provides for adding the identified new text criteria to the step (q) text criteria loaded into

said positive designated one of said nodes. Step (t) provides for reiterating steps (h) through step (m). As set forth at paragraph 50 in the Rule 132 Declaration, claim 10 looks to the extraction of common features and an iterative process which functions to improve the search by improving a question or rule. Nevin has nothing to do with documents, Nevin deals with similarities or relationships. However, those similarities or relationships are between nodes and not documents and interactions associated with nodes. There is no search in Nevin nor criteria addition to improve a search. Lastly, Nevin doesn't carry out steps (q) through (s) and certainly does not reiterate them as set forth in set (t).

Claim 11, dependent upon claim 1 elaborates upon step (k) with step (k1) determining additional text criteria where said document symbol locations are not likely to correspond with said text criteria determined at step (e). Step (k2) provides for adding said additional text criteria to said text criteria determined at said step (e). In rejecting the claim, the Examiner has cited paragraphs 0313 through 0316 of Nevin. As set forth at paragraph 52 of the Rule 132 Declaration, Nevin is not addressing the subject matter of documents nor a search associated with documents. Additionally, Nevin does not address the subject matter of iteratively adding additional text criteria to improve a search. Nevin doesn't search thus Nevin doesn't improve search questions. Nevin doesn't evaluate document symbol locations at all.

Claim 12, dependent upon claim 8 provides that step (I) is carried out by drawing at said display of said net a boundary defining a region of said symbol. The Examiner has cited paragraph 0320 of Nevin and commented that the boundary region is determined by the available screen space. As set forth at paragraph 54 of the Rule 132 Declaration, Nevin is describing the accommodation of a need for arithmetically changing the shape of a net within the space confines of the display. By contrast, claim 12 selects a grouping of documents by drawing boundaries on the display around document symbols. There are no documents in Nevin nor a technique for selecting them. Nevin is only looking at the relationship of nodes using distance and positioning.

It is noted that the Examiner has rejected steps (a), (f), and (g) of independent claim 13 over Quinn, et al., commenting that Quinn, et al., discloses a method for evaluating the text content of a database. As indicated at paragraph 9 of the Rule 132 Affidavit, a fundamental difference is present between the instant invention and Quinn, et al., in that the present invention is a searching method iteratively developing search questions and rules whereas Quinn, et al., is building a keyword database searched by predetermined keywords and is not concerned with a method for generating questions utilized to effectively search a database.

Step (a) of claim 13 recites providing a computer system having a user interface with a display. The Examiner has cited paragraph 0106 of Quinn, et al. Applicants reiterate their statement made in conjunction with step (a) of claim 1. Step (f) of claim 13 provides for selecting a said document attribute to be correlated and the criteria for establishing an attribute value match. The Examiner has cited paragraph 0093, lines 4-7 of Quinn, et al., and commented that the different genres are considered to represent the text criteria. That being the case, the Examiner is stating that artist name, album name and genre are text criteria. Step (f) is being rejected out of context because it is looking to correlate the same document in two delimited regions. The step further provides for selecting criteria for establishing attribute value match. As noted at paragraph 56 of the Rule 132 Declaration, Quinn, et al., has nothing to do with the procedures of claim 13, Quinn, et al., speaking of three clearly predefined attributes as opposed to the instant method wherein text search attributes are employed which are not so predetermined and could represent anything from a portion of a word to an entire book. Step (g) of claim 13 provides for determining the presence of one or more document attribute value match pairs as correlations between said first and second regions. The Examiner has cited paragraph 0094 of Quinn, et al., and has commented that grouping the attributes is considered to represent creating match pairs. As set forth at paragraph 57 of the Rule 132 Declaration, there are no documents in Quinn, et al. There are no regions in Quinn, et al. There are no document attribute value match pairs in Quinn, et al. There are no document attribute value match pairs as correlations between first and second regions.

The Examiner next turns to the remaining steps of the claim and uses Nevin as the rejection resource. It should be pointed out that as in the case of claim 1, the steps of these claims are being considered by the Examiner on a step by step basis and the steps are not considered together which is what the invention is. The claims have not been examined as a whole.

The Examiner next turns to step (b) of claim 13 providing for forming one or more nets each comprising at least two nodes associated by at least one interaction, one or more said nodes representing an evaluation criteria, said one or more nets being viewable at said display. The Examiner has cited Fig. 1 of Nevin as well as paragraph 0081. As set forth in paragraph 61 of the Rule 132 Declaration, Nevin stores <u>all</u> of the data in nodes whereas document criteria is stored in the nodes of the instant invention since it is a searching device. There is nothing in Nevin describing how two nets would interact with each other. That is, two nets are in the instant invention, used together to do a searching feature that neither net could do alone. As

noted, claim 13 should be looked at in its entirety. Step (c) of claim 13 provides for treating said documents to have an attribute value and calculating for each document a geometric relative distance with respect to said node criteria and displaying corresponding document symbols at said display. In assessing the step, the Examiner has cited paragraphs 0031 and 0185 of Nevin with a comment that the connection strength of the length from one node to another is considered to represent relative distance. Referring to paragraph 71 of the Rule 132 Declaration, the Examiner's analysis of this step is incorrect for reasons given above, and particularly because Nevin has nothing to do with documents nor document symbols. Further, Nevin does not calculate relative distance with respect to a node criteria. There are no document symbols in Nevin. There are no dual regions in Nevin. There are no regions at all in Nevin, except the screen real-estate. Step (d) of claim 13 provides for delimiting at said display a first region of said document symbols. The Examiner cites paragraph 0031 and Fig. 1 of Nevin with the comment that linking the nodes together is considered to represent delimiting, and connection of node 1 to node 2 is considered to represent a first region. The Examiner is incorrect. As stated at paragraph 73 of the Rule 132 Declaration, there is no concept of region at all in Nevin and the Examiner's observation that connecting two nodes together constitutes a region is simply incorrect. The Examiners indication of linking the nodes together represents delimiting is incorrect. There are no document symbols or explicit boundaries in Nevin to establish a delimited region. Step (e) of claim 13 provides for delimiting at said display a second region of said document symbols. The Examiner again cites paragraph 0031 and Fig. 1 of Nevin with the comment that linking the nodes together is considered to represent delimiting; the connection of node 2 to node 3 is considered to represent a second region. Again, as set forth at paragraph 74 of the Rule 132 Declaration, there are no document symbols in Nevin. There are no regions, let alone two regions in Nevin which are delimited. The linking of node 2 to node 3 in Nevin does not constitute a region of document symbols. Step (h) of claim 13 provides for displaying said correlations at said display. Considering this step in the absence of the rest of the claim, the Examiner cites paragraph 0033 of Nevin with the comment that the display of nodes based on a location calculated from force parameters is considered to represent displaying correlations. As set forth at paragraph 75 of the Rule 132 Declaration, the Examiners commentary is simply and totally incorrect. Nevin is concerned with entirely different subject matter. There are no two regions in Nevin, there is no correlation between the same document symbols in two regions in Nevin. Nevin simply doesn't apply.

Clam 14, dependent upon claim 13 sets forth that step (d) provides a said first region extending over more than one said net and includes the step (d1) mapping said first region to a first document set by selecting the union or intersection of documents on different nets. In considering this claim, the Examiner again looks to paragraph 0031 and Fig. 1 of Nevin. As set forth at paragraph 76 of the Rule 132 Declaration, there are no document symbols in Nevin. There is no searching in Nevin. There is no first region in Nevin. There is no first region extending over more than one net in Nevin. There is no suggestion of mapping of the first region to a first document set by selecting a union or intersection of documents on different nets in Nevin.

Claim 15, dependent upon claim 13 is similar to claim 14 but is concerned with the second region extending over more than one said net and including the step of mapping said second region to a second document set by selecting the union or intersection of documents on different nets. The same response provided with respect to claim 14 also applies to claim 15. There are no regions over nets and no mapping by selecting the union or intersection of documents on different nets so much as suggested in Nevin.

Claim 16, dependent upon claim 13 provides that step (f) selects said criteria for establishing an attribute value match by defining an attribute value tolerance. In rejecting this step, the Examiner cites paragraphs 0009 and 0093, lines 4-7 of Quinn, et al., with the commentary that the different genres are considered to represent the text criteria. As set forth at paragraph 79 of the Rule 132 Declaration, the attributes discussed in Quinn, et al., are predetermined established facts and there can be no attribute value tolerance as provided in claim 16.

Claim 17, dependent upon claim 16, provides that step (g) determines the presence of a document attribute match pair by determining whether the attribute value of a document in said first region is equal to the attribute value of a document in said second region within said attribute value tolerance. The Examiner applies paragraphs 0009 and 0093 of Quinn, et al., to this claim. As set forth at paragraph 81 of the Rule 132 Declaration, there are no first and second regions suggested in Quinn, et al., and as is quite apparent, there is no determination of the presence of a document attribute match pair between regions within an attribute value tolerance as discussed above in connection with claim 16.

Claim 18, dependent upon claim 13 provides that step (d) is carried out by providing a computer generated line or lines visible at said display. The Examiner cites paragraph 0083 of Nevin. As set forth at paragraph 83 of the Rule 132 Declaration, there are no document

symbols nor are there regions suggested in Nevin. Nevin only describes the positioning of lines between nodes which basically are representations of some predetermined relationship between two nodes, an arrangement that has no relevance to claim 18.

Claim 19, dependent upon claim 13 provides that step (e) is carried out by providing a computer generated line or lines visible at said display. The Examiner cites paragraph 0083 of Nevin with respect to this claim. As set forth at paragraphs 84 and 85 of the Rule 132 Declaration, applicants reassert their responses given in connection with claim 18. Further, Nevin provides a line which basically is a representation of some predetermined relationship between nodes. That has no suggestion of delimiting a second region of document symbols as well as no suggestion of document symbols at all. There is no suggestion in Nevin of delimiting by computer generated lines about these document symbols.

Claim 20, dependent upon claim 13 provides that step (h) is carried out by providing visible line at said display connecting two said symbols and representing said correlation. The Examiner has cited paragraph 0083 of Nevin. As set forth at paragraph 86 of the Rule 132 Declaration, the commentary given in connection with claims 18 and 19 apply but now with respect to providing a visible line between two document symbols representing a correlation. It should be borne in mind that the claim is dealing with two regions of document symbols. There is simply no application of Nevin to this searching approach.

Claim 21, dependent upon claim 13 provides that said step (f) selects said document attribute or document identification and said step (g) identifies the same document in each said first and second region as a said correlation. The Examiner has cited paragraph 0094 of Nevin. As set forth at paragraph 88 of the Rule 132 Declaration, claim 21 looks to see where a particular document symbol appears in two different kinds of organization. Nevin concerns no document symbol, no regions, and provides no discussion of correlation but only the relationship between nodes, not document symbols.

It is noted that claims 22-24 have been rejected under §103 of the Patent Statute as being unpatentable over U. S. patent application publication 2004/0078366 by Crooks, et al. (Crooks, et al.) in view of Nevin. The Examiner comments that Crooks, et al., discloses a method for searching the text content of a document database with respect to a population of documents. That is incorrect. As set forth at paragraph 90 of the Rule 132 Declaration, Crooks, et al., is an approach wherein there is parsing of a health care order based on the parsing of specific keywords, terms and abbreviations, wherein essentially a string based order is parsed and "normalized" e.g., matched and replaced with actual terms to determine specific

components such as drug dosage, whereupon a distance is assigned which identifies how many character changes had to be made to achieve a match with the rule-based database. Crooks, et al., does not fingerprint, does not compare fingerprints nor does it employ interactivity or a graphical component as does the present invention. Further, as set forth at paragraph 89 of the Rule 132 Declaration, the assertion that Crooks, et al., is searching text content is incorrect and that the database of Crooks, et al., is one of rule, i.e., medical terms and not the text content of documents.

Paragraph (a) of claim 22 sets forth the providing a computer system having a user interface with a display. The Examiner cites paragraph 0020 of Crooks, et al., which provides a computer system. Paragraph (b) of claim 22 provides for identifying the population of documents to be searched, the Examiner citing paragraph 0022 along with the terms "searching the database". As noted above, Crooks, et al., doesn't search documents, it parses received medical orders. It is questionable whether such database is a population of documents as now contemplated. Step (c) of claim 22 sets forth normalizing the documents of the identified population with a sequence of sub-steps. The Examiner cites paragraph 0023, lines 7-9 of Crooks, et al., The Examiner then applies Crooks, et al., to sub-steps (c1) through (c4) where there are similarities. However, commencing with sub-step (c5) the instant normalization technique walks away from Crooks, et al. Sub-step (c5) sets forth setting an offset and factor for numeric class, the Examiner citing paragraph 0024, lines 1-28 of Crooks et al. As set forth at paragraph 92 of the Rule 132 Declaration, this sub-step determines whether a number is within a particular range, the step representing an aspect of achieving a representation of text which is searchable as opposed to the Crooks, et al., approach which seeks an accurate grammatical representation. Similarities can be found with sub-step (c6) and sub-step (c7) sets the stage for sub-step (c8) which sets forth for each accessed, W, which is a number, converting such number into a sequence of word numbers, WN, and normalizing said word numbers for fingerprinting. The Examiner cites paragraph 0024, lines 1-28 of Crooks, et al. As set forth at paragraph 93 of the Rule 132 Declaration, Crooks, et al., has nothing comparable to normalizing word numbers as, WN. Sub-step (c9) sets forth marking the position and length of each, W, or normalized word number, WN. The Examiner cites paragraph 0026, lines 31 et seq., of Crooks, et al. As stated at paragraph 95 of the Rule 132 Declaration, Crooks, et al., is concerned with an attempt to find an approximate match with the rule database. When an exact one cannot be found, the number of letters required to be changed to match a rule term in the database representing a distance and such an approach has no relationship to the recitation of

sub-step (c9). Sub-step (c10) sets forth for each, W, or normalized, WN, completing said normalization by reiterating steps (c8) and (c9). The Examiner cites paragraph 0026, lines 10-12 of Crooks, et al., commenting that refining is considered to represent repeating. Referring to paragraph 97 of the Rule 132 Declaration, with respect to the term "refining" the present invention is doing an iterative process to achieve normalization while Crooks, et al., strive to obtain word matches and then refine by eliminating the junk, and there is no relationship between these methods nor their purpose. Step (d) of claim 22 provides fingerprinting said normalized documents. The Examiner cites paragraphs 0024 – 0026 of Crooks, et al., with respect to this step. As set forth at paragraph 98 of the Rule 132 Declaration, there is no fingerprinting whatsoever taught by Crooks, et al.

The Examiner then returns to applying Nevin to claim 22. Step (e) sets forth forming one or more nets, each comprising at least two nodes, one or more said nodes representing an evaluation criteria, said one or more nets exhibiting two or more spaced apart nodes connected by one or more interactions. The Examiner cites Fig. 1 of Nevin with respect to step (e). As set forth at paragraph 99 of the Rule 132 Declaration, the applicants reiterate commentary made in connection with claim 1 and step (f). Step (f) of claim 22 sets forth for each normalized document, calculating its geometric relative distance from a said node. The Examiner cites paragraph 0031 and 0185 of Nevin with the commentary that the connection strength of the length from one node to another is considered to represent the relative distance. Applicant reasserts their response concerning step (h) of claim 1. Step (g) sets forth displaying said one or more nets at said display in combination with one or more document symbols representing a said document located in correspondence with said calculated relative distance. The Examiner cites paragraphs 0033 and 0084 as well as Fig. 2 of Nevin. This is the same citation with respect to step (i) of claim 1 and the applicants reassert their response to that rejection in response to this rejection. The final step of claim 22 has now been amended to be identified as step (h). The step sets forth determining from said document symbol locations at said display, if any, those documents which are more likely to correspond with said evaluation criteria. The Examiner has cited paragraphs 0313 and 0315 of Nevin in the same manner as asserted in connection with step (k) of claim 1. The argument set forth therein is repeated for this rejection. See paragraph 102 of the Rule 132 Declaration.

Claim 23, dependent upon claim 22, describes sub-steps to sub-step (c8) and encompasses sub-steps (c8.1 - c8.8). All of these sub-steps were rejected under paragraphs 0030-0032 of Crooks, et al. As set forth at paragraph 103 of the Rule 132 Declaration, Crooks,

et al., neither carries out nor suggests any of these sub-steps. Sub-step (c8.1) converts any date characterized word number, WN, to a float or integer. As set forth in paragraph 104 of the Rule 132 Declaration, Crooks, et al., merely determines the presence of a date and uses it directly while the present step is developing a record that can be used for searching. Sub-step (c8.2) sets forth applying an offset and factor to the word number, WN, to derive, X. As set forth at paragraph 104 of the Rule 132 Declaration, applying an offset and factor to improve fingerprinting is not suggested by Crooks, et al., whatsoever. With respect to sub-step (c8.3) setting the range, R; sub-step (c8.4) setting forth calculate the quantity  $T = (log_{10} X)/R$ ; sub-step (c8.5) successively decrementing the value of range, R, and calculating the quantity, T, until, R, is equal to zero; (c8.6) designating, S, as the position of a significant numeral in, X; (c8.7) assigning each successive quantity, T, to a corresponding successive position, S, to derive the first component of normalized word number, WN; and (c8.8) subsequent to said step (c8.7), assigning each successive said numeral in, X, to a corresponding successive position, S, to derive a second component of said normalized word number, WN. As set forth at paragraph 105 of the Rule 132 Declaration, there is no similarity or purpose in any way related to the teachings of Crooks, et al.

Claim 24, dependent upon claim 23, provides that said step (c8.3) further comprises the step: (c8.3.1) setting the precision, P, of the normalized word number, WN, and said (c8.8) is carried out until the number of said successive positions, S, deriving said second component equals the value of said precision, R. The Examiner again has applied paragraphs 0030 – 0032 of Crooks, et al., to the steps of this claim. As set forth at paragraph 107 of the Rule 132 Declaration, Crooks, et al. is not utilizing precision, presumably for good reason. One would not wish to use that approach in dealing with medical applications. Both components of this claim utilize a precision function.

It is noted that US Patent No. 6,154,213 by Rennison; US Patent No. 6,360,227 by Aggarwal, et al; US Patent No. 7,028,026 by Yang, et al; US Patent No. 6,888,548 by Gallivan; and US Patent No. 6,778,995 by Gallivan have been considered by the Examiner to be pertinent but have not been applied in rejecting the claim program. Apparently, the Examiner has recognized that these references, taken singly or in combination, fail to militate against the patentability of the present invention.

In view of the foregoing remarks wherein the application drawings have been corrected under the rules, typographical error is corrected in the specification and claims and the

applicants have demonstrated that the claim program clearly distinguishes over the references of record, further and favorable action is earnestly solicited.

Respectfully submitted,

Date: //ww/5

Gerald L. Smith/ Reg. No. 22,009

MUELLER AND SMITH, L.P.A. MUELLER-SMITH BUILDING 7700 Rivers Edge Drive Columbus, Ohio 43235-1355

Tel.: 614-436-0600 Fax: 614-436-0057

email: jsmith@muellersmith.com

Declaration under 37 CFR 1.132 Declaration under 37 CFR 1.131 Replacement Drawings

## **CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited on August 15, 2006 with the United States Postal Service as first class mail in an envelope addressed to:

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450



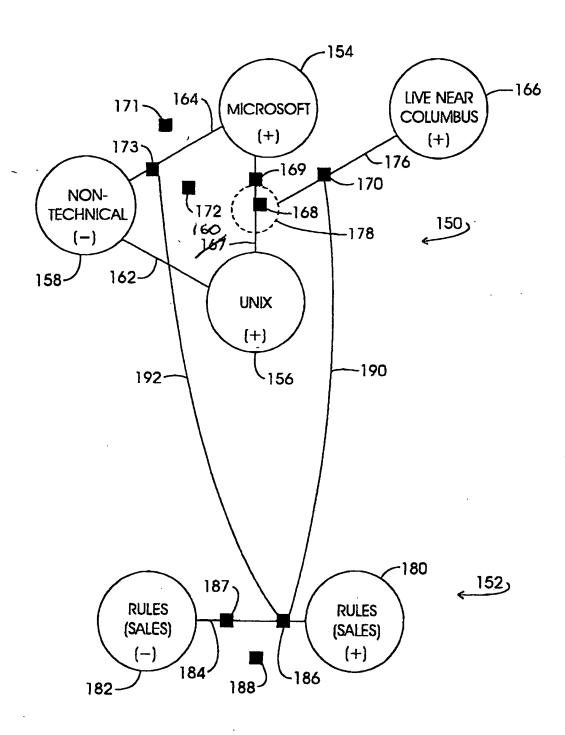


FIG. 8

